CLAIM AMENDMENTS

Please amend claims 29 and 33 as follows.

1. (Previously Presented) A method, comprising:

applying a discrete Haar wavelet or a discrete Morlet wavelet to a radio frequency (RF) signal under test;

extracting at least one timing parameter from the RF signal using a wavelet transform of the RF signal, wherein the timing parameter includes a clock period of the RF signal; and

presenting the clock period of the RF signal as a result of extracting the at least one timing parameter to characterize the RF signal.

Claims 2. – 4. (Canceled).

5. (Previously Presented) The method of claim 1, further comprising extracting rise time for the RF signal.

6. (Previously Presented) The method of claim 1, further comprising extracting fall time for the RF signal.

7. (Original) The method of claim 1, further comprising extracting at least one frequency parameter from the RF signal.

8. (Original) The method of claim 7, further comprising extracting a frequency increase from the RF signal.

Claims 9.-12. (Canceled).

13. (Previously Presented) A method, comprising:

computing scale level 1 coefficients as pairwise differences of samples of a radio frequency (RF) signal;

computing scale level 1 coefficients as pairwise averages of the samples;

searching for a local maxima and a local minima of the scale level 1 coefficients;

computing time coordinates for the local maxima and minima of the scale level 1 coefficients;

computing scale level 2 coefficients as pairwise differences of the scale level 1 averages;

searching for local maxima and minima of the scale level 2 coefficients;

computing time coordinates for the local maxima and minima of the scale level 2 coefficients; and

presenting the time coordinates for the local maxima and minima of the scale level 2 coefficients to characterize the RF signal.

14. (Original) The method of claim 13, further comprising correcting the time coordinates of the local maxima and minima of the scale level 2 coefficients.

15. (Original) The method of claim 13, further comprising computing a clock period for the RF signal by doubling a difference between time coordinates of two successive corrected local maxima and minima of the scale level 2 coefficients.

16. (Original) The method of claim 13, further comprising computing a clock period for the RF signal by subtracting time coordinates of two successive corrected local maxima of the scale level 2 coefficients.

17. (Original) The method of claim 16, further comprising computing jitter for the clock period.

18. (Original) The method of claim 13, further comprising computing a rise time of the RF signal by determining when the scale level 1 coefficients are negative.

19. (Original) The method of claim 13, further comprising computing a fall time of the RF signal by computing when the scale level 1 coefficients are positive.

20. (Previously Presented) A method, comprising:

computing scale level 1 coefficients samples of a radio frequency (RF) signal;

searching for local maxima and minima of the scale level 1 coefficients;

computing time coordinates for the local maxima and minima of the scale level 1 coefficients;

performing a polynomial best-fit function on the local maxima;

performing a polynomial best-fit function on the local maxima; and

presenting the time coordinates for the local maxima and minima of the scale level 1 coefficients to characterize the RF signal.

21. (Original) The method of claim 20, further comprising extracting a phase discontinuity from the RF signal.

22. (Original) The method of claim 20, further comprising extracting a frequency variation from the RF signal.

23. (Previously Presented) A system, comprising:

a radio frequency (RF) signal source coupled to emit an RF signal; and

a discrete Haar wavelet tool or a discrete Morlet wavelet tool coupled to apply a wavelet to the RF signal to extract a timing parameter from the RF signal using a wavelet transform of the RF signal, wherein the timing parameter includes a clock period of the RF signal.

24. (Canceled).

25. (Previously Presented) The system of claim 23, wherein the wavelet tool is coupled to extract frequency characteristics from the RF signal.

26. (Previously Presented) The system of claim 23, wherein the wavelet tool is coupled to extract phase characteristics from the RF signal.

27. (Canceled).

28. (Canceled).

29. (Previously Presented) An article of manufacture, comprising:

a machine-accessible medium including data that, when accessed by a machine, cause the machine to perform the operations comprising:

applying a discrete Haar wavelet or a discrete Morlet wavelet to a radio frequency (RF) signal under test;

extracting at least one timing parameter from the RF signal using a wavelet transform of the RF signal, wherein the timing parameter includes a clock period of the RF signal; and

presenting the at least one timing parameter to characterize the RF signal.

30. (Original) The article of manufacture of claim 29, wherein the machine-accessible medium further includes data that cause the machine to perform operations comprising extracting at least one timing parameter from the RF signal.

31. (Original) The article of manufacture of claim 29, wherein the machine-accessible medium further includes data that cause the machine to perform operations comprising extracting at least one frequency parameter from the RF signal.

32. (Original) The article of manufacture of claim 29, wherein the machine-accessible medium further includes data that cause the machine to perform operations comprising extracting at least one phase parameter from the RF signal.

33. (Previously Presented) An article of manufacture, comprising:

a machine-accessible medium including data that, when accessed by a machine, cause the machine to perform the operations comprising:

computing scale level 1 coefficients as pairwise differences of samples of a radio frequency (RF) signal;

computing scale level 1 coefficients as pairwise averages of the samples;

searching for a local maxima and a local minima of the scale level 1 coefficients;

computing time coordinates for the local maxima and minima of the scale level 1 coefficients;

computing scale level 2 coefficients as pairwise differences of the scale level 1 averages;

searching for local maxima and minima of the scale level 2 coefficients; [[and]]

computing time coordinates for the local maxima and minima of the scale level 2 coefficients; and

presenting the time coordinates for the local maxima and minima of the scale level 1 coefficients to characterize the RF signal.

34. (Original) The article of manufacture of claim 33, wherein the machine-accessible medium further includes data that cause the machine to perform operations comprising subtracting time coordinates of two successive corrected local maxima of the scale level 2 coefficients.

35. (Original) The article of manufacture of claim 33, wherein the machine-accessible medium further includes data that cause the machine to perform operations comprising determining when the scale level 1 coefficients are negative.

36. (Currently Amended) An article of manufacture, comprising:

a machine-accessible medium including data that, when accessed by a machine, cause the machine to perform the operations comprising:

computing scale level 1 coefficients samples of a radio frequency (RF) signal;

searching for local maxima and minima of the scale level 1 coefficients;

computing time coordinates for the local maxima and minima of the scale level 1 coefficients;

performing a polynomial best-fit function on the local maxima; and

performing a polynomial best-fit function on the local maxima; and

presenting the time coordinates for the local maxima and minima of the scale level 1 coefficients to characterize the RF signal.

37. (Original) The article of manufacture of claim 36, wherein the machine-accessible medium further includes data that cause the machine to perform operations comprising extracting a phase variation from the RF signal.

38. (Original) The article of manufacture of claim 36, wherein the machine-accessible medium further includes data that cause the machine to perform operations comprising extracting a frequency variation from the RF signal.

39. (Previously Presented) A method, comprising:

applying a wavelet to a radio frequency (RF) signal under test;

extracting at least one timing parameter from the RF signal using a wavelet transform of the RF signal, wherein the timing parameter includes a clock period of the RF signal;

extracting at least one phase parameter from the RF signal, wherein the phase parameter comprises a phase discontinuity; and

presenting the clock period of the RF signal as a result of extracting the at least one timing parameter to characterize the RF signal.

40. (Previously Presented) The method of claim 39, further comprising extracting jitter rate for the RF signal.